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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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00/050,783 00/24/99 KIM

S 49322

YERGEN KEIL & WEINKAUF
1101 CONNECTICUT AVE NW
WASHINGTON DC 20006

HM22/1219

EXAMINER

WILLIS, M

ART UNIT	PAPER NUMBER
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1619

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DATE MAILED:

12/19/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/382,708

Applicant(s)

KIM ET AL.

Examiner

Michael Willis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 4 and 9 is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed Nov. 19, 1999 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Only abstracts were provided of the following foreign patent documents: DE 4225045, DE 4314305, JP 3206023, JP 3206024, JP 7050912, JP 1213221. The abstracts were considered and are listed on Form 892: Notice of References Cited.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The disclosure is objected to because of the following informalities: the structure on page 4 lines 6-10 is incorrect. To indicate a (meth)acrylic ester as described, a C should be inserted immediately in front of the first O. Furthermore, on page 29, line 16, "wasser" should be replaced with "water." Appropriate correction is required.
4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(b):

- (a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise,

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and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

The specification is objected to under 37 CFR 1.71 because applicants' disclosure does not provide any description of coating compositions or binder for solid medicament or any other coatings comprising the polymer of claim 1. It would require undue experimentation for one of ordinary skill in the art to determine how to use these polymers as claimed in claim 10.

Claim Objections

5. Claim 4 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. Claim 4 depends on "a composition as claimed in claim 1" as well as "formula II, as defined in claim 2." See MPEP § 608.01(n).

6. Claim 9 is objected to under 37 CFR 1.75(c) as being in improper form because it depends on claim 8 as well as one of claims 1 to 9. A claim cannot depend on itself and a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-8 and 10 are indefinite and incorrect because a composition claim requires more than one component. The instant claims recite only one component.

9. Claims 5 and 6 are rejected for being vague and indefinite. The claims are unduly alternative, making the subject matter of the invention unclear. Additionally, the phrase "in incorporated form" in claims 5 and 6 is vague and unclear.

10. Claim 7 is rejected because a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. In the present instance, claim 7 recites the broad limitation "from 40 to 85% by weight," followed by "preferably from 45 to 80% by weight," which is a narrower statement of the limitation. The statements "from 10 to 30%....preferably from 15 to 28%," "from 1 to 20%.....preferably from 2 to 15%," and "from 1 to 30%....preferably 2 to 25%," also contain narrow ranges within broad limitations.

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11. Claim 8 is rejected under 35 U.S.C. 112, second paragraph for including the phrase "a hair-treatment composition, in particular in the form...". The use of "in particular in the form" is a narrower statement of the broad limitation "a hair-treatment composition," which renders the claim indefinite.

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 1 and 4 -10 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the disclosed embodiments of c, d, and e, does not reasonably provide enablement for components c, d, and e as broadly as claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

14. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. . It would require undue experimentation for one of ordinary skill in the art to determine how to use these polymers as claimed in claim 10.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1-3 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ribba. See entire disclosure, particularly col. 2, lines 1-27; col. 2, line 45; col. 2, line 64 - col. 3, line 7; col. 4, lines 35-39; col. 6, lines 54-59. The examiner reads these claims as not requiring component e.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mita *et al.* taken with Ribba, and further in view of applicants' disclosure.

19. Mita teaches a hair dressing composition containing a film-forming resin. The resin disclosed by Mita comprises monomers including (meth)acrylamides, (meth)acrylates, polyalkylene glycol (meth)acrylates, and/or other monomers. See col. 2, line 5- col. 3, line 63. The described polymers lack the explicit use of a mono- and/or

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dicarboxylic acid monomer. However, under the conditions applied to the polymer in col. 5, lines 3-8, some of the ester groups would be cleaved to form acrylic acid monomer units *in situ*. Therefore, it would have been obvious to one of ordinary skill in the art that at least one α,β -ethylenically unsaturated carboxylic acid was already present in the composition as taught by Mita.

20. Furthermore, Ribba discloses that for purposes of dissolving products in water, "those most commonly employed are synthetic carboxylic polymers obtained from unsaturated carboxylic monomers." See col. 1, lines 9 – 20. In addition, the specification of the current application acknowledges that (meth)acrylic acid is a known component in hair-treatment compositions. See pages 2-4 of the specification. Therefore, it would have been obvious to one of ordinary skill in the art to have included at least one α,β -ethylenically unsaturated carboxylic acid in the composition of Mita because of the teachings of Ribba in order to improve the solubility characteristics of the polymer product.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Willis whose telephone number is (703) 305-1679. The examiner can normally be reached on Monday to Friday from 8:30 a.m. to 5 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diana Dudash can be reached on (703) 308-2328. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-2742 for regular communications and (703) 308-2742 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

MAW
December 15, 2000


DIANA DUBASH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600